

DESCRIPTIONS OF SOME NEW SPECIES OF ORTHOPTERA  
FROM NORTH-WESTERN SOUTH AUSTRALIA.—No. 1.

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PLATE XXXII.

The species described form part of a small collection made by Mr. Herb. Basedow, as one of the members of an exploring expedition under the command of Mr. L. A. Wells. This part of the country had been rarely traversed, and no insects had been collected there previously. The expedition left Adelaide in March, 1903, and returned in the following November.

Order, ORTHOPTERA.

Family, BLATTARIÆ.

PERIPLANETA BASEDOWI, *sp. nov.* Plate xxxii. (three females in good condition).

Ochraceous, shining, size large.

Head with impressed minute dots; a round pale spot at the base of the antennæ and separate from them and the eyes; face with faint, dark spots in transverse rows. Antennæ brownish, very slender, as long (or nearly so) as the body. Pronotum transverse, elliptical, with subangular, subsemilunate, brownish impressions. Meso- and metanotum paler marked; scutellum elongate-triangular, promiscuous. Elytra as long as or longer than the wings, deep black, shining; anal vein and transverse veinlet very fine, pale. Wings much longer than the body, anterior area and the veins of the posterior deep black; transverse veinlets pale, membrane between them greyish. Legs shorter, but stouter than those of *P. americana*; concave surface (under the femora) of the coxæ with small raised granula; femoral spines few and slender; middle and hind femora with about six strong spines in each row; tarsi short, glabrous. Abdomen ovate, compressed, thin, rugulose, with a submarginal row of small, dark spots; hind margins of segments above and beneath broadly darker; posterior angles of penultimate segment alone produced; supra-anal lamina subrotundate, depressed; scarcely twice as long as the lamina; subgenital lamina emarginate, very short and slender.

Length of body, 25-28 mm.

Length of pronotum, 8 mm.

Length of elytra, 30-33 mm.

Length of wings, 25-27 mm.

Width of pronotum, 11-12 mm.



The bright-coloured pronotum and legs contrast most conspicuously with the deep lustrous black tint of the elytra, and render this species the handsomest of the Australian species and of the genus, and I have much pleasure in dedicating it to the assiduous collector as a slight mark of esteem.

#### MANTODEA.

##### (?) *PSEUDOMANTIS PULCHELLUS*, *sp. nov.*

Female. Pale brownish grey to pale brown (abdomen). Head transverse, extremely compressed, pale grey; eyes very large, a darker band with parallel borders over the middle, and continued over the ridge of the head; front with three minute tubercles in place of ocelli. Antennæ missing. Prothorax smooth above, very elongate and slender, slightly dilated anteriorly; margin densely and finely spinulose; a narrow pale transverse line before the middle of the dilatation, anterior to which an elongate, gradually attenuated depression extends about halfway towards front margin, posteriorly a distinct median ridge extends continuously to the hind margin of the metanotum. Meso.- and metanotum pale, subequal. Elytra longer than the wings, thinly membranous, pale brownish; fore margin, anal area, and a large round discal spot whitish; apex obtuse. Wings subrotundate, frontal area rosy with brownish apex, remainder opaque, deep bluish black, with a few linear transverse streaks anteriorly; apex brown, with a narrow white border. Forelegs elongate; coxæ unarmed, external keels whitish; femora with four spines externally and numerous spinelets internally; a very long spine followed by two much smaller ones obliquely opposite to the last external; tibiæ multispinulose, and a long spur. Middle and hind legs very long and slender, unarmed. Abdomen subcylindrical, slightly attenuated towards extremity, not dilated; supra-anal lamina triangular, equilateral, subacute; lateral lobes subtriangular, whitish; cerci slender, not, or scarcely, extending beyond the lobes; anal appendages forming two small, acute spines.

Length of body, 52 mm.

Length of head, 1 mm.

Length of pronotum, 13 mm.

Length of elytra, 11.5 mm.

Length of wings, 9 mm.

Length of hind femora, 17 mm.

Width of head, 4 mm.

Width of elytra, 3 mm.

Width of dilatation, 2.75 mm.

It is with some diffidence that I place this species in the genus it is assigned to, it apparently not agreeing exactly



with any I have descriptions of; but not having the male (perhaps akin to *P. Kraussiana*, Sauss.), the creation of a new genus appeared inadvisable. In the form and colouration of elytra and wings it seems to approximate the African genus *Danuria*.

#### ACRIDIDÆ.

CORYPHISTES CYANOPTEROIDES, *sp. nov.*, 2 (male and female).

Resembles *C. cyanopterus*, Charp., but is darker and larger; dull brownish-grey. Fastigium very prominent, nearly parallel-sided, apex abruptly rounded. Eyes large, dark reddish-brown. Antennæ ensiform, joints gradually diminishing in width from the third. Ocelli inconspicuous, brown. Head with a fine medial ridge from near the apex of the fastigium, and continued to the hind margin of the pronotum; dark lateral parallel-sided bands, bordered above narrowly white, from the inferior part of the eyes, and continued to the hind margin of the pronotum, the space between the bands marbled with black. Elytra pale brown, veins much darker, a few blackish streaks adjoining the base of the humeral and near the middle of the anal vein; transverse veinlets very numerous, mostly pale, but bordered mostly and capriciously deep black or brown. Wings with costal area smoky brown (mas.), or blackish (fem.), veins and veinlets much darker; remainder much paler, basal and anal part pale blue. Fore and middle legs slender, body colour; hind femora strong, base not very tumid, unarmed, inner side wholly black (mas.), or more or less purplish (fem.); hind tibiæ pale greyish externally, remainder rosy-purplish; with two rows of ten spines above, the external ones black and much the larger. Abdomen grey or brown, banded dark brown or blackish (mas. and fem.); cerci conical, very short.

Length of body, 45-47 mm.

Length of antennæ, 14-15 mm.

Length of pronotum, 10-12 mm.

Length of elytra, 48-50 mm.

Length of hind femora, 21-22 mm.

Length of hind tibiæ, 18 mm.

This species is widely distributed in South Australia, and has been usually included under Charpentier's name, *C. cyanopterus*. From this species it differs by the much more prominent and angular fastigium, general colouration, and other characters. It inhabits forests and woods sparingly, and is slow to take to flight. Its colour appears to be highly protective, inasmuch as it agrees more or less perfectly with the tints of the trunks of trees, etc., upon which it rests, or settles when disturbed.



CORYPHISTES SERRATUS, *sp. nov.*

Female. Brown, variegated with grey and black. Head large; eyes oval, metallic golden-bronze. Fastigium wide above, concave, blackish, keeled, emarginate, contracted into a narrow ridge in front below the apex between the antennæ, then again gradually diverging and terminating rotundately beyond the ocellus. Lateral ocelli large, black, midway between the eyes and the antennæ. Occiput, sides and underside of head, also the sternum yellowish-grey; a low median ridge and an impressed, curved black band from the base of the fastigium on either side to the base of the head. Antennæ blackish, apparently with 18 joints; basal joint short, stout; joint 2 still shorter, thinner, cup-shaped; remainder much longer, subcylindrical, gradually diminishing in size to apex; from the third with a broad membranous border, forming alternately larger subtriangular lobes, with rounded hind margin to near the apex. Pronotum black, with numerous pale striæ bordering the fore and hind margins, and pale round granulations scattered over the rest, fore margin emarginate, hindmargin rounded. Elytra pale grey, acute, the extremely numerous longitudinal veins and transverse veinlets bordered dark brown. Wings with basal area tinged pale greenish, shading into brownish along anterior costa and towards apex, costal veins and veinlets dark brown, remainder pale. Legs mottled blackish and brown, fore and median ones short, underside and internally more or less densely pilose, tibiæ with a few minute spinelets along the inner ridge. Hind femora strong, upper ridge minutely spinose, lower ridge with nine larger spines, and hairy between; discal ridges spinulose; internal side smooth, crimson with broad transverse black markings; lower genicular lobes very long, narrowly lunate, as long, or longer than, the width of the joint. Hind tibiæ slender, mottled brown and blackish, inner side black and crimson; external upper ridge with eleven acute conical spines, internal with nine, space between densely pilose; spurs very small. Tarsi thinly hairy; claws oppositely divergent; pulvillus large. Abdomen blackish brown above, pale beneath. Cerci mutilated. One female.

Length of body, 41 mm.

Length of antennæ, 18 mm.

Length of pronotum, 10 mm.

Length of elytra, 50 mm.

Length of wings, 45 mm.

Length of hind femora, 26 mm.

Length of hind tibiæ, 22 mm.



The remarkably and prominently keeled fastigium, broad serrated antennæ, markings of the pronotum, and armature of the hind femora and tibiæ, also the elongated, curved genicular lobes, appear to render this a well-marked species, and, perhaps, with the following the type of a subgenus.

CORYPHISTES NIGROCONSPERSUS, *sp. nov.*

Male and female. Smoky brown; in general form resembling preceding. Head pale (mas.) or dark (fem.) brown. Fastigium blackish, subrectangular above, separated from occiput by a more or less distinct furrow; distinctly keeled only towards apex, in front contracted to an obtuse ridge, then expanding between the antennæ forms a distinct callosity, with the ocellus in the central depression, the distinct (mas.) or indistinct (fem.) sinuous lateral ridge extending to the margin of the face. Occiput and sides of head nearly smooth, dull; a narrow black median stripe from base of fastigium to pronotum, a slightly curved, irregularly bounded brownish band on either side above; laterally a broad, parallel-margined black band from the base of the antennæ, interrupted by the lower part of the eyes, and a narrow black submarginal, more irregular one, starting conjointly with the former. Eyes oval, dark bronzy-brown; lateral ocelli rather small, bright brown, adjoining the lower border of an elongate black spot on the side of the fastigium. Antennæ dark brown, mottled paler, ensiform; marginal lamina very thin, basal joint subconical, joint 2 very short, not much thinner than the first; joint 3 over three times longer than the preceding together, triangular, broad; joints 4-7 quadrate, angular, subequal; joints 8-9, 10-11, 12-13 successively narrower, longer than wide, quadrangular; joint 14 half as wide as preceding, remainder gradually diminishing in dimensions, last ones very minute. Pronotum darker than the head, almost smooth, rounded in front and behind, with a few minute tubercles above and two broad pale stripes to posterior transverse furrow, also the black cephalic stripes more or less distinctly continued to the hind margin. Elytra ochreous-brown, with numerous small spots scattered over all; apex obtuse. Wings pale greenish-brown; veins and veinlets dark, not bordered. Legs, also face and underside, more or less beset with brown hairs. Fore and middle legs unarmed. Hind femora stout, as long, or longer than, the body; external genicular lobes moderately long, curved, gradually narrowed to the subacute apex; internal lobes large, subquadrate; external ridges minutely spinose, densely hairy above; discal area white (mas.) or pale ochreous (fem.), with 16 black, narrow,



angulate, transverse bands; internal area blackish and purplish; hind tibiæ with two rows of 9-11 large acute spines, besides 4 curved spurs, space between densely hairy. Tarsi long; claws and pulvilli small. Abdomen stout, smooth, shining, and ending with 6 small black spines.

Length of body—Male, 45 mm.; female, 52 mm.

Length of antennæ—Male, 17 mm.; female, 21 mm.

Length of pronotum—Male, 11 mm.; female, 15 mm.

Length of elytra—Male, 43 mm.; female, 47 mm.

Length of hind femora—Male, 24 mm.; female, 28 mm.

Length of hind tibiæ—Male, 20 mm.; female, 25 mm.

There is a specimen of each sex, and fairly well preserved. The female differs from the male, besides size, only in the markings being less distinct and some occasionally obsolete. The species is a well-marked one, and new to the Museum collection.

### GRYLLACRIDÆ.

#### GRYLLACRIS ATROFRONS, *sp. nov.* (fem.).

Size moderate, smoky-brown. *Face*, clypens and mandibles black, except large white ocelliform spot; sides of head brown; antennæ brown, base blackish; fastigium keeled. Pronotum above broadly and its hind margin entirely black, sides pale. Meso- and metanotum blackish. Elytra and wings net-veined, pale brownish veins and veinlets deep brown. Femora above and externally dark, apices of middle and hind femora pale. Tibiæ with four small spines externally and internally, finely and shortly hirsute, black at the base, remainder pale; tarsi brownish, slender. Abdomen short, truncate, alternately pale and dark banded. Cerci slender, pale; ovipositor slightly curved, pale, apex darker, acute.

Length of body, 23 mm.

Length of pronotum, 4.5 mm.

Length of elytra, 39 mm.

Length of hind femora, 13 mm.

Length of ovipositor, 21 mm.

This species resembles *G. atrogeniculatus*, m., but is smaller and differs in the black face and top of head, large white ocelliform spot, keeled fastigium, and longer ovipositor, besides other characters.